Claims:

1.   A method of distributing information to a mobile receiver, comprising;
        receiving information representing at least one of ionosphere information, clock information, and satellite integrity information from a first satellite in a first satellite network, where the received information pertains to at least one satellite in a second satellite network;
        combining at least a portion of the received information with assistance data to form augmented assistance data; and
        coupling the augmented assistance data to a mobile receiver, where the mobile receiver uses the augmented assistance data to process satellite signals from at least one satellite in the second satellite network.

2.   The method of claim 1, wherein said first satellite network comprises at least one of a Wide Area Augmentation System (WAAS), Euro Geostationary Navigation Overlay Service (EGNOS) and a Multi-Functional Satellite Augmentation System (MSAS).

3.   The method of claim 1, wherein said ionosphere information is ionospheric delay data.

4.   The method of claim 1 wherein the second satellite network is part of at least one of a Global Positioning System, GLONASS, and GALILEO.

5.   The method of claim 1 further comprising computing, within the mobile receiver, a position of the mobile receiver using the augmented assistance data.

6.   The method of claim 1 wherein the augmented assistance data comprises pseudorange correction data that is derived from the received information.

7.   The method of claim 6 wherein the pseudorange correction data is sent to the mobile receiver as differential GPS data.

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8.   A method of generating assistance data for an assisted-SPS system comprising:

receiving information representing at least one of ionosphere information, clock information, and satellite integrity information from a first satellite in a first satellite network, where the received information pertains to at least one satellite in a satellite positioning system (SPS) satellite network;

combining the received information with assistance data to form augmented assistance data that can be used to process satellite signals transmitted by at least one SPS satellite.

9.   The method of claim 8, wherein said first satellite network comprises at least one of a Wide Area Augmentation System (WAAS), a Euro Geostationary Navigation Overlay Service (EGNOS) and a Multi-Functional Satellite Augmentation System (MSAS).

10.   The method of claim 8, wherein said ionosphere information is ionospheric delay data.

11. The method of claim 11 wherein the SPS is part of at least one of a Global Positioning System, GLONASS and Galileo.

12.   The method of claim 8 further comprising computing, within the mobile receiver, a position of the mobile receiver using the augmented assistance data.

13.   The method of claim 8 wherein the augmented assistance data comprises pseudorange correction data that is derived from the received information.

14.   The method of claim 13 wherein the pseudorange correction data is sent to the mobile receiver as differential GPS data.

15.   Apparatus for providing atmospheric information to a mobile receiver comprising:

a receiver adapted to receive information representing at least one of ionosphere information, clock information, and satellite integrity information from a first satellite in a first satellite network, where the received information pertains to at least one satellite in a second satellite network;

a server, coupled to the receiver, for combining at least a portion of the received information with assistance data to form augmented assistance data that can be used by a mobile device to process satellite signals from at least one satellite in the second satellite network.

16.   The apparatus of claim 15 further comprising:

a wireless network, coupled to the server, for transmitting the augmented assistance data to a mobile receiver.

17.   The apparatus of claim 15 wherein said ionosphere information comprises an ionospheric delay data.

18.   The apparatus of claim 15 wherein said first satellite network is at least one of a Wide Area Augmentation System (WAAS), Euro Geostationary Navigation Overlay Service (EGNOS), and Multi-Functional Satellite Augmentation System (MSAS).

19.   A method of improving a position computation accurately comprising:

receiving information at an A-GPS server representing at least one of ionosphere information, clock information and satellite integrity information from a first satellite in a first satellite network, where the received information pertains to at least one satellite in a second satellite network;

computing within a mobile receiver at least one pseudorange measurement, where the pseudorange measurement represents a relative distance between a mobile receiver and at least one satellite in the second satellite network;

sending the at least one pseudorange measurement to the A-GPS server;

correcting the at least one pseudorange measurement using the received information; and

computing a position of the mobile receiver using the corrected at least one pseudorange.

20.	The method of claim 19, wherein said first satellite network comprises at least one of a Wide Area Augmentation System (WAAS), Euro Geostationary Navigation Overlay Service (EGNOS) and a Multi-Functional Satellite Augmentation System (MSAS).

21.	The method of claim 19, wherein said ionosphere information is ionospheric delay data.

22. The method of claim 19 wherein the second satellite network is part of at least one of a Global Positioning System, GLONASS, and GALILEO.